

I CLAIM:

- 5 1. A message structure providing a communications protocol for use over a high speed network to control a video source, the message structure having a message header selected from one of:
 - (i) a command header;
 - (ii) a data header; and
 - 10 (iii) an answer header.
2. The communications protocol message structure of claim 1 further including a selected message header that is an interrupt header.
- 15 3. The communications protocol message structure of claim 1, where the video source being controlled provides image data.
4. The communications protocol message structure of claim 1, wherein a message having a command header further includes data fields defining:
 - 20 (i) a command code;
 - (ii) request ID;
 - (iii) a message length;
 - (iv) a command address; and
 - (v) command data.
- 25 5. The communications protocol message structure of claim 2, further including a data field defining a version.
6. The communications protocol message structure of claim 2, wherein the data
30 field defining the command code provides unique codes corresponding to a register read command, a register write command, a configuration read command, and a configuration write command.

7. The communications protocol message structure of claim 2, wherein the data field defining the command code provides a unique code corresponding to an action command.
- 5 8. The communications protocol message structure of claim 2, wherein the command code data field provides unique codes corresponding to a get device info action command; a trigger action command and a re-send packet action command.
9. The communications protocol message structure of claim 8, wherein the
10 command code data field further provides a unique code corresponding to a module reset action command.
10. The communications protocol message structure of claim 1, wherein a message having a data header further includes data fields defining:
15 a packet ID; and
a data ID.
11. The communications protocol message structure of claim 10, wherein a message having a data header has unique valuetags for a regular message and a re-send message
20 data types.
12. The communications protocol message structure of claim 6, wherein a network node receiving a message containing a command header produces a response message containing an answer header.
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13. The protocol of claim 10, wherein a message having a data header further includes the data fields defining:
(i) data length;
(ii) a time stamp; and
30 (iii) resent image.
14. The protocol of claim 10, further including a format code whereby different types of data can be uniquely identified.

15. The protocol of claim 1, further including an identifier number.
16. A method for communicating data over a network comprising:
 - providing a source of image packets, each such packet including an identifier
 - 5 number; and
 - providing a receiver of image packets to process a series of image packets; and
 - tracking the receiving image package identifier number;
 - producing re-send image packet request for packets not successfully received.